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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,590	10/25/2006	Keith Clark	03-0009/US1 (8470-69/NPB)	6065
29293 7590 03/21/2008 FREUDENBERG-NOK GENERAL PARTNERSHIP LEGAL DEPARTMENT 47690 EAST ANCHOR COURT PLYMOUTH, MI 48170-2455				
EXAMINER PATEL, VISHAL A				
ART UNIT 3676		PAPER NUMBER		
NOTIFICATION DATE 03/21/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/553,590

Applicant(s)

CLARK, KEITH

Examiner

Vishal Patel

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/88)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Drawings

1. The drawings (figures 1-8) are objected to under 37 CFR 1.83(a) because they fail to show cross-hatching for the shaft and housing as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackowski et al (US. 4,448,426).

Jackowski illustrates a unitized pinion seal for mounting between a first member and a second member rotatable relative to the first member, the unitized pinion seal having a sleeve portion (sleeve that is mounted on the shaft 114) adapted to mount rotationally fixed to the first member and a seal portion mounted to the sleeve portion in a radial interference fit and adapted to mount to the second member (seal contacting 22).

The first member is an axle companion flange (surface of shaft 112 that extends from the shaft end) and the second member is a carrier/bearing cage (22).

The sleeve portion is adapted to install to the first member with a radial interference fit (the sleeve is fitted over the surface 112) such that the radial interference fit of the seal portion to the sleeve portion creates a greater axial retention load than an axial installation load created by the interference fit of the sleeve portion relative to the first member (this is the case because of the lip seal 130 and the member 110 of the sleeve).

The seal portion includes a retainer mechanism engaging the sleeve member prior to assembly of the unitized pinion seal to the first member (this is the case as seen in figure 8).

The retainer mechanism includes a first retainer ring engaging seal body and a second retainer ring engaging the sleeve portion prior to assembly of the unitized pinion seal to the first member (this is the case since 106 is attached to lip 132 and also contacts the sleeve 104 or as seen in figures 12 and 3).

The method of installing the unitized pinion seal having steps of assembling a sleeve portion of the pinion seal to a seal portion of the pinion seal with a radial interference fit (as seen in figures 3, 8 and 12), assembling the pinion seal to the carrier/bearing cage (ass seen in figure 1), partially installing the axle companion flange into the sleeve portion while generating less axial installation force between the axle companion flange and the sleeve portion than an axial retention load created by the interference fit between seal portion and the sleeve portion (this is the case since the unitized union seal is placed in the bearing cage 22 without being taken apart, figure 1) and installing the axle companion flange into the sleeve portion while preventing further axial movement of the sleeve portion relative to the companion flange (this is the case as seen in figure 1), to thereby overcome the axial retention load and move the sleeve portion axially relative to the seal portion (this is the case since the pinion seal is unitized before and after being installed on the bearing cage or carrier)

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Romero, Carson et al, Walther, Boyers et al, Seeh et al, Heinzen, Matsushima et al and Gerulski.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. P./
Primary Examiner, Art Unit 3676

/Vishal Patel/
Primary Examiner, Art Unit 3676